



University of Warwick institutional repository: <http://go.warwick.ac.uk/wrap>

This paper is made available online in accordance with publisher policies. Please scroll down to view the document itself. Please refer to the repository record for this item and our policy information available from the repository home page for further information.

To see the final version of this paper please visit the publisher's website. Access to the published version may require a subscription.

Author(s): Mandy Robbins; Leslie J. Francis ; Bethan Edwards

Article Title: Prayer, personality and happiness: A study among undergraduate students in Wales

Year of publication: 2008

Link to published version:

[http://dx.doi.org/ 10.1080/13674670701702548](http://dx.doi.org/10.1080/13674670701702548)

Publisher statement: 'This is an electronic version of an article published in Robbins, M. et al. (2008). Prayer, personality and happiness: A study among undergraduate students in Wales. Mental Health, Religion & Culture, vol. 11, pp. 93-99. Mental Health, Religion & Culture is available online at:
<http://www.informaworld.com/smpp/section?content=a788555835&fulltext=713240928>

Running head: Prayer, personality and happiness

Prayer, personality and happiness: A study among undergraduate students in Wales

Dr Mandy Robbins and the *Revd Canon Professor Leslie J Francis

University of Warwick

and

Bethan Edwards

University of Wales, Bangor

*Author: telephone 01248 382566
e-mail: l.j.francis@bangor.ac.uk

[st/c/mydoc/artics/mr/prayer and happiness](#)

Abstract

In order to examine the association between prayer and happiness, a sample of 131 undergraduate students attending a university in Wales completed three measures: the Oxford Happiness Questionnaire, the abbreviated Eysenck Personality Questionnaire Revised, and prayer frequency assessed on a five-point scale. The data demonstrated a significant positive correlation between prayer frequency and happiness before controlling for individual differences in personality. After controlling for personality, however, this apparent association vanished.

Prayer and happiness: a study among undergraduate students in Wales

Following a considerable period of neglect in the psychological literature renewed interest in empirical studies concerned with prayer emerged from the mid-1980s (Finney & Malony, 1985) and were flourishing by the beginning of the twenty-first century (Francis & Astley, 2001). Alongside an important research tradition concerning the objective effects of prayer among those for whom prayer is offered (Byrd, 1988; Harris, Gowda, Kolb, Strychacz, Vacek, Jones, Forker, O'Keefe, & McCallister, 1999), a second important research tradition has focused on the subjective correlates of prayer among those who do the praying. For example, one strand of this tradition has focused on the relationship between prayer and purpose in life among children and young people. Research has demonstrated that those who pray more frequently report higher levels of purpose of life than those who never pray (Francis, 2005; Francis & Burton, 1994; Francis & Evans, 1996). A second strand of this tradition has focused on prayer and school-related attitudes. Research has demonstrated that those who pray hold more positive attitudes toward school (Francis, 1992; Montgomery & Francis, 1996; Robbins, Babington, & Francis, 2003). A third strand of this tradition has focused on prayer and social values. Research has demonstrated that those who pray more frequently hold higher levels of prosocial attitudes (Francis & Robbins, 2006). Previous studies have not, however, concentrated specifically on exploring the relationship between prayer and happiness.

Reviewing the wider literature on the relationship between religion and happiness, Robbins and Francis (1996) concluded that the equivocal findings emerging from that literature could be attributed, at least in part, to the wide range of religious measures used and the elusive nature of the notion of happiness itself. This conclusion was supported a decade later by the comprehensive review and analysis reported by Lewis and Cruise (2006). For their own

empirical study, Robbins and Francis (1996) advocated the use of the Oxford Happiness Inventory (Argyle, Martin, & Crossland, 1989) since this instrument both builds on a clear and coherent definition of happiness and displays sound psychometric credentials.

The underlying definition of happiness on which the Oxford Happiness Inventory builds, as clearly rehearsed by Argyle and Crossland (1987), maintains that happiness comprises three components: the frequency and degree of positive affect or joy; the average level of satisfaction over a period; and the absence of negative feelings, such as depression and anxiety. The psychometric credentials of the 29-item scale reported by the test constructors include an internal reliability of .90 and a seven-week test-retest reliability of .78. Validity was established against happiness ratings reported by friends, and by correlations with measures of positive affect, negative affect, and life satisfaction. By the late 1990s, Francis (1999) reviewed fifteen published studies which had employed the Oxford Happiness Inventory and concluded that this instrument was already facilitating a secure body of empirical knowledge about the nature and correlates of happiness.

In their pioneering study, Robbins and Francis (1996) explored the association between scores recorded on the Oxford Happiness Inventory and religiosity as assessed by the Francis Scale of Attitude toward Christianity (Francis, Lewis, Philipchalk, Brown, & Lester, 1995) among a sample of 360 undergraduate students in the UK. After controlling for the possible contaminating influence of personality, these data demonstrated a positive association between religion and happiness. These findings have been replicated by a series of subsequent studies employing the same two measures among various populations (Francis, Jones, & Wilcox, 2000; French & Joseph, 1999; Francis & Lester, 1997; Francis & Robbins, 2000; Francis, Robbins, & White, 2003). Given the way in which other studies consistently point to the relationship

between personality and religion (Francis, Lewis, Brown, Philipchalk, & Lester, 1995) and to the relationship between personality and happiness (Francis, Brown, Lester, & Philipchalk, 1998), the majority of the studies concerned with the relationship between religion and happiness have controlled for individual differences in personality, and done so by working within the Eysenckian tradition of personality assessment (Eysenck & Eysenck, 1991).

Although the Oxford Happiness Inventory has demonstrated good psychometric properties, there remains one significant disadvantage with this instrument. Since each of the 29 items has been designed with four fixed-response options, the instrument requires quite a lengthy questionnaire. In order to address this problem, Hills and Argyle (2002) proposed the development of the Oxford Happiness Questionnaire, an instrument which retained the same 29 basic issues of the parent instrument, but re-expressed each issue in terms of the conventional Likert-type response format.

Against this background, the aim of the present study is to examine the association between prayer (measured in terms of self-reported frequency) and happiness (measured by the Oxford Happiness Questionnaire) among a student sample, taking personality variables into account by means of the Eysenckian measures.

Method

Sample

A sample of 131 undergraduate students attending a university in Wales was recruited by the third author inviting cooperation from fellow students occupying university halls of residence. The project was undertaken in fulfilment of course work and received a high level of cooperation. The sample comprised 71 males and 60 females. One third of the respondents

(32%) were 18 or 19 years of age, 43% were 20 or 21 years of age, and the remaining 25% were over the age of 21. Two-fifths of the respondents (40%) claimed no religious affiliation, 57% identified with a Christian denomination, and the remaining 3% identified with a non-Christian religious group.

Measures

Happiness was assessed by the Oxford Happiness Questionnaire (Hills & Argyle, 2002). This is a 29-item measure. Each item was assessed on a five-point scale: agree strongly, agree, not certain, disagree, and disagree strongly. This instrument provides a range of scores between 29 and 145, with higher scores representing greater happiness. The test developers reported an alpha co-efficient of .91.

Personality was assessed by the abbreviated Eysenck Personality Questionnaire Revised (Francis, Brown, & Philipchalk, 1992). The instrument proposes four six-item measures: extraversion, neuroticism, psychoticism, and lie scale. Each item was assessed on a two-point scale: yes and no. Each measure provides a range of scores between 0 and 6, with the high scoring pole of each scale representing the construct identified by the scale name. In England the test developers reported alpha coefficients of .82 for extraversion, .77 for neuroticism, .52 for psychoticism, and .63 for the lie scale.

Prayer was assessed by a single item concerned with frequency on a four-point scale: (4) nearly every day, (3) at least once a month, (2) occasionally, and (1) never.

Data analysis

The data were analysed by SPSS, employing the following routines: frequency, reliability,

correlations, and regression.

Results

The Oxford Happiness Questionnaire functioned very well, generating an alpha co-efficient of .90 (Mean = 98.12, SD = 14.73). Nearly one quarter of the respondents (24%) prayed nearly every day, 10% prayed at least once a month, and 24% prayed occasionally, leaving 42% who never prayed. The zero order correlation between frequency of prayer and scores recorded on the Oxford Happiness Questionnaire was positive and statistically significant ($r = .23, p < .01$). Table 1 presents the multiple regression model exploring the cumulative

- insert table 1 about here -

prediction on happiness scores of sex, extraversion, neuroticism, psychoticism, lie scale, and prayer, entered in that fixed order. These data demonstrate that both extraversion and neuroticism function as strong predictors of individual differences in happiness, but that the apparent association between prayer and happiness vanishes after controlling for personality variables.

Discussion and conclusion

The present study set out to examine the relationship between prayer and happiness, employing a simple frequency measure of prayer activity alongside a recognised psychological measure of happiness, the Oxford Happiness Questionnaire (Hills & Argyle, 2002). The data demonstrated an apparent simple correlation between prayer and happiness. At face value this finding is consistent with the view that prayer promotes a more positive attitude toward life and enhances personal happiness. However, after controlling for individual differences in

personality, as defined by Eysenck's dimensional model and operationalised through the abbreviated Eysenck Personality Questionnaire Revised (Francis, Brown, & Philipchalk, 1992), the apparent significant positive association between prayer and happiness vanished. This finding is consistent with the views that Eysenckian personality dimensions are powerful factors in shaping the predisposition to personal happiness, and that the apparent association between prayer and happiness in the present study was an artefact of individual differences in personality. The absence of a significant association between prayer (as a measure of religiosity) and happiness in the present study poses an interesting problem for future research. On the one hand, previous studies using the Oxford Happiness Inventory (Argyle, Martin, & Crossland, 1989) have generally reported a positive association between happiness and religiosity (Francis, Jones, & Wilcox, 2000; Francis & Lester, 1997; Francis & Robbins, 2000; Francis, Robbins, & White, 2003; French & Joseph, 1999; Robbins & Francis, 1996). On the other hand, previous studies using the Depression-Happiness Scale (Joseph & Lewis, 1998) have generally reported no association between happiness and religiosity (Lewis, 2002; Lewis, Lanigan, Joseph, & de Fockert, 1997; Lewis, Maltby, & Burkinshaw, 2000; Lewis, Maltby, & Day, 2005). A second set of studies using the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffen, 1985) have also generally reported no association between happiness and religiosity (Lewis, 1998; Lewis, Joseph, & Noble, 1996; Lewis, Lanigan, Joseph, & de Fockert, 1997). These discrepant findings may suggest that the notion of happiness operationalised by the Oxford Happiness Questionnaire has more in common with the Satisfaction with Life Scale and with the Depression-Happiness Scale than with the Oxford Happiness Inventory. What is now needed is a study that employs all four measures of happiness alongside appropriate measures of religiosity.

Weaknesses of the present study include reliance on a student sample, a restricted age

range, and a narrowly defined cultural context. Nevertheless, the study is able to commend the usefulness of the Oxford Happiness Questionnaire within this model of research and provides a useful basis for replication among other samples.

References

- Argyle, M., & Crossland, J. (1987). Dimensions of positive emotions. *British Journal of Social Psychology*, 26, 127-137.
- Argyle, M., Martin, M., & Crossland, J. (1989). Happiness as a function of personality and social encounters. In J. P. Forgas & J. M. Innes (Eds), *Recent advances in social psychology: An international perspective* (pp. 189-203). Amsterdam, North Holland: Elsevier Science Publishers.
- Byrd, R. C. (1988). Positive therapeutic effects of intercessory prayer in a coronary care unit population. *Southern Medical Journal*, 81, 826-829.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffen, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Finney, J. R., & Malony, H. N. (1985). Empirical studies of Christian prayer: A review of the literature. *Journal of Psychology and Theology*, 13, 104-115.
- Francis, L. J. (1992). The influence of religion, gender and social class on attitudes toward school among eleven year olds in England. *Journal of Experimental Education*, 60, 339-348.
- Francis, L. J. (1999). Happiness is a thing called stable extraversion: A further examination of the relationship between the Oxford Happiness Inventory and Eysenck's dimensional model of personality and gender. *Personality and Individual Differences*, 26, 5-11.
- Francis, L. J. (2005). Prayer, personality and purpose in life among churchgoing and non-churchgoing adolescents. In L. J. Francis, M. Robbins, & J. Astley (Eds), *Religion, education and adolescence: International empirical perspectives* (pp. 15-38). Cardiff: University of Wales Press.
- Francis, L. J., & Astley, J. (Eds) (2001). *Psychological perspectives on prayer: A reader*.

Leominster: Gracewing.

- Francis, L. J., Brown, L. B., Lester, D., & Philipchalk, R. (1998). Happiness as stable extraversion: A cross-cultural examination of the reliability and validity of the Oxford Happiness Inventory among students in the UK, USA, Australia and Canada. *Personality and Individual Differences*, 24, 167-171.
- Francis, L. J., Brown, L. B., & Philipchalk, R. (1992). The development of an abbreviated form of the Revised Eysenck Personality Questionnaire (EPQR-A): Its use among students in England, Canada, the USA and Australia. *Personality and Individual Differences*, 13, 443-449.
- Francis, L. J., & Burton, L. (1994). The influence of personal prayer on purpose in life among Catholic adolescents. *Journal of Beliefs and Values*, 15, 2, 6-9.
- Francis, L. J., & Evans, T. E. (1996). The relationship between personal prayer and purpose in life among churchgoing and non-churchgoing 12-15 year olds in the UK. *Religious Education*, 91, 9-21.
- Francis, L. J., Jones, S. H., & Wilcox, C. (2000). Religiosity and happiness: During adolescence, young adulthood and later life. *Journal of Psychology and Christianity*, 19, 245-257.
- Francis, L. J., & Lester, D. (1997). Religion, personality and happiness. *Journal of Contemporary Religion*, 12, 81-86.
- Francis, L. J., Lewis, J. M., Brown, L. B., Philipchalk, R., & Lester, D. (1995). Personality and religion among undergraduate students in the United Kingdom, United States, Australia and Canada. *Journal of Psychology and Christianity*, 14, 250-262.
- Francis, L. J., Lewis, J. M., Philipchalk, R., Brown, L. B., & Lester, D. (1995). The internal consistency reliability and construct validity of the Francis Scale of Attitude toward

Christianity (adult) among undergraduate students in the UK, USA, Australia and Canada.

Personality and Individual Differences, 19, 949-953.

Francis, L. J., & Robbins, M. (2000). Religion and happiness: A study in empirical theology.

Transpersonal Psychology Review, 4(2), 17-22.

Francis, L. J., & Robbins, M. (2006). Prayer, purpose in life, personality and social attitudes

among non-churchgoing 13- to 15-year-olds in England and Wales. *Research in the Social Scientific Study of Religion*, 17, 123-155.

Francis, L. J., Robbins, M., & White, A. (2003). Correlation between religion and happiness: A

replication, *Psychological Reports*, 92, 51-52.

French, S., & Joseph, S. (1999). Religiosity and its association with happiness, purpose in life,

and self-actualisation. *Mental Health, Religion and Culture*, 2, 117-120.

Harris, W. S., Gowda, M., Kolb, J. W., Strychacz, C. P., Vacek, J. L., Jones, P. G., Forker, A.,

O'Keefe, J. H., & McCallister, B. D. (1999). A randomised, controlled trial of the effects of remote, intercessory prayer on outcomes in patients admitted to the coronary care unit.

Archives of Internal Medicine, 159, 2273-2278.

Hills, P., & Argyle, M. (2002). The Oxford Happiness Questionnaire: A compact scale for the

measurement of psychological well-being. *Personality and Individual Differences*, 33, 1073-1082.

Joseph, S., & Lewis, C. A. (1998). The depression-happiness scale: Reliability and validity of a

bipolar self-report scale. *Journal of Clinical Psychology*, 54, 537-544.

Lewis, C. A. (1998). Towards a clarification of the association between religiosity and life

satisfaction. *Journal of Beliefs and Values*, 19, 119-122.

Lewis, C. A. (2002). Church attendance and happiness among Northern Irish undergraduate

students: No association. *Pastoral Psychology*, 50, 191-195.

Lewis, C. A., & Cruise, S. M. (2006). Religion and happiness: Consensus, contradictions, comments and concerns. *Mental Health, Religion and Culture*, 9, 213-225.

Lewis, C. A., Joseph, S., & Noble, K. E. (1996). Is religiosity associated with life satisfaction? *Psychological Reports*, 79, 429-430.

Lewis, C. A., Lanigan, C., Joseph, S., & de Fockert, J. (1997). Religiosity and happiness: No evidence for an association among undergraduates. *Personality and Individual Differences*, 22, 119-121.

Lewis, C. A., Maltby, J., & Burkinshaw, S. (2000). Religion and happiness: Still no association. *Journal of Beliefs and Values*, 21, 232-236.

Lewis, C. A., Maltby, J., & Day, L. (2005). Religious orientation, religious coping and happiness among UK adults. *Personality and Individual Differences*, 38, 1193-1202.

Montgomery, A., & Francis, L. J. (1996). Relationship between personal prayer and school-related attitudes among 11-16 year old girls. *Psychological Reports*, 78, 787-793.

Robbins, M., Babington, P., & Francis, L. J. (2003). Personal prayer and school-related attitudes among 8- to 11-year-olds. *Journal of Beliefs and Values*, 24, 245-248.

Robbins, M., & Francis, L. J. (1996). Are religious people happier? A study among undergraduates. In L. J. Francis, W. K. Kay, & W. S. Campbell (Eds), *Research in religious education* (pp. 207-217). Leominster: Gracewing.

Table 1: Multiple regression model with happiness as the dependent variable

| | r^2 | Increase | | | Beta | t | $p <$ |
|--------------|-------|----------|------|-------|------|------|-------|
| | | r^2 | F | $p <$ | | | |
| sex | .01 | .01 | 0.7 | NS | .07 | 0.9 | NS |
| extraversion | .14 | .13 | 20.0 | .001 | .22 | 2.9 | .01 |
| neuroticism | .38 | .24 | 49.5 | .001 | -.49 | -6.6 | .001 |
| psychoticism | .40 | .02 | 4.5 | .05 | -.09 | -1.2 | NS |
| lie scale | .41 | .01 | 2.1 | NS | .11 | 1.6 | NS |
| prayer | .42 | .01 | 1.6 | NS | .09 | 1.3 | NS |